

**INFORMATION SECURITY VIA DYNAMIC ENCRYPTION WITH HASH FUNCTION**

**ABSTRACT**

A system and method providing secure information. An encryption key is regenerated by

5 performing byte addition of an encryption key, encrypted data, and a hash vector based upon an encryption key. A hash vector is hashed by scanning indexed bytes of an encryption key and using indices and associated values of indices of an encryption key as indices of two bytes in the hash vector to be swapped. An authentication key is regenerated by performing byte addition of an authentication key, an auxiliary key, and a hash vector based upon an authentication key.